

IN THE CLAIMS

Claims 1-21 (Canceled).

22. (New) A device for communicatively coupling a packet network to at least one communication network having a different information format, the device comprising:

a packet interface for exchanging information via the packet network;

at least one network interface, each of the at least one network interface for exchanging information via an associated one of the at least one communication network in an associated format;

at least one converter for selectively converting information received by the packet interface for transmission via one of the at least one network interface in the associated format, and for selectively converting for transmission via the packet interface information received from the one of the at least one network interface in the associated format; and

a controller for receiving call setup information from one of the packet network and the at least one network interface, the controller adapting the operation of the converter and establishing an association between the packet interface and one of the at least one network interface, based upon the call setup information.

23. (New) The device of claim 22 wherein the packet interface is compliant with an Internet protocol (IP).

24. (New) The device of claim 23 wherein the Internet protocol is the transport control protocol (TCP)/Internet protocol (IP).

25. (New) The device of claim 22 wherein the information exchanged via the packet interface comprises digitized voice information.

26. (New) The device of claim 25 wherein at least a portion of the information exchanged via the packet interface is unrelated to the exchange of digitized voice information.

27. (New) The device of claim 22 wherein the at least one network interface provides the functionality of a conventional telephone switching network interface.

28. (New) The device of claim 27 wherein the at least one network interface provides at least one of a battery supply, over-voltage protection, ringing current, tone generation, tone detection, two wire to four wire conversion, and test functionality.

29. (New) The device of claim 27 wherein the at least one converter converts digitized voice information into an analog voice signal, and an analog voice signal into digitized voice information.

30. (New) The device of claim 29 wherein the at least one converter buffers digitized voice information for a period of time to minimize gaps in an analog voice signal.

31. (New) The device of claim 27 wherein the at least one network interface is a digital interface.

32. (New) The device of claim 22 wherein the at least one network interface is a second packet interface.

33. (New) The device of claim 22 wherein the at least one converter compensates for a difference in bit rate between interfaces.

34. (New) The device of claim 22 wherein the at least one converter adapts information received via the packet interface into analog modem signals for transmission via the at least one network interface, and adapts analog modem signals received via the at least one network interface into information for transmission via the packet interface.

35. (New) A method for communicatively coupling a packet network to at least one communication network having a different information format, the method comprising:

receiving call setup information from one of the packet network and the at least one communication network;

establishing an association between the packet network and one of the at least one communication network based upon the call setup information;

receiving information from the packet network in a first information format;

converting the received information from the first information format to a second information format based upon the call setup information;

sending the converted information via the one of the at least one communication network;

accepting information from the one of the at least one communication network in the second information format;

transforming the accepted information from the second information format to the first information format based upon the call setup information; and

transmitting the transformed information via the packet network.

36. (New) The method of claim 35 wherein the packet network is compliant with an Internet protocol (IP).

37. (New) The method of claim 36 wherein the Internet Protocol is compliant with the transmission control protocol (TCP)/ Internet protocol (IP).

38. (New) The method of claim 35 wherein the information exchanged via the packet network comprises digitized voice information.

39. (New) The method of claim 35 wherein the information exchanged via the packet network comprises data.

40. (New) The method of claim 39 wherein at least a portion of the data is unrelated to the exchange of digitized voice information.

41. (New) The method of claim 35 wherein the at least one communication network is a second packet network.

42. (New) The method of claim 41 wherein the second packet network is compliant with an Internet protocol (IP).

43. (New) The method of claim 42 wherein the Internet Protocol is compliant with the transmission control protocol (TCP)/ Internet protocol (IP).

44. (New) The method of claim 35 wherein the at least one communication network comprises a conventional telephone switching network.

45. (New) The method of claim 44 wherein the second information format is an analog format.

46. (New) The method of claim 44 wherein one of the second information format is a modem signal.

47. (New) The method of claim 44 wherein the second information format is a digital format.

48. (New) The method of claim 35 wherein the converting comprises converting digitized voice information into an analog voice signal.

49. (New) The method of claim 35 wherein the transforming comprises converting an analog voice signal into digitized voice information.

50. (New) The method of claim 35 wherein the converting comprises buffering digitized voice information for a period of time to minimize gaps in an analog voice signal.